

Please add the following claims:

19. (Newly Added) A MOS transistor, comprising:

a semiconductor substrate having a top surface;

isolation regions formed in said substrate;

a gate structure formed over said substrate having sidewalls disposed on either side of said gate structure;

B1 a source region having a source lightly doped region and a source heavily doped drain region, wherein an impurity concentration of said source lightly doped region is lower than an impurity concentration of said source heavily doped region, wherein the source lightly doped region is formed below one of said sidewalls, and wherein said heavily doped region is disposed between said source lightly doped region and said isolation region;

a drain region having a drain lightly doped region and a drain heavily doped region, wherein an impurity concentration of said drain lightly doped region is lower than an impurity concentration of said drain heavily doped region, wherein the drain lightly doped region is formed below one of said sidewalls, and wherein said heavily doped drain region is disposed between said drain lightly doped region and said isolation region; and

metallic silicide layers respectively formed on said source heavily doped regions and said drain heavily doped regions, said metallic silicide layers being in contact with said sidewalls and said isolation regions, wherein undersides of said metallic silicide layers are substantially coplanar with respective undersides of said sidewalls in contact with said top surface.

20. (Newly Added) A MOS transistor as recited in claim 19, wherein said metal silicide layers are formed between each of said spacers and said isolation regions.

21. (Newly Added) A semiconductor device, comprising:

a semiconductor substrate having a top surface;

isolation regions formed in said substrate, and which define active regions;

MOS transistors respectively disposed in said active regions, each of said MOS transistors having a gate structure, a source region, a drain region and sidewalls disposed on either side of each of said gate structures;

b¹ wherein each of said source regions has a source lightly doped region and a source heavily doped drain region, wherein an impurity concentration of said source lightly doped region is lower than an impurity concentration of said source heavily doped region, wherein the source lightly doped region is formed below one of said sidewalls, and wherein said heavily doped region is disposed between said source lightly doped region and one of said isolation regions;

wherein each of said drain regions has a drain lightly doped region and a drain heavily doped region, wherein an impurity concentration of said drain lightly doped region is lower than an impurity concentration of said drain heavily doped region, wherein the drain lightly doped region is formed below one of said sidewalls, and wherein said heavily doped drain region is disposed between said drain lightly doped region and said isolation region; and

metallic silicide layers respectively formed on said source heavily doped regions and said drain heavily doped regions, said metallic silicide layers being in contact with

said sidewalls and said isolation regions, wherein undersides of said metallic silicide layers are substantially coplanar with respective undersides of said sidewalls in contact with said top surface.

22. (Newly Added) A semiconductor device as recited in claim 21, wherein said metal silicide layers are formed between each of said spacers and said isolation regions.

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23. (Newly Added) A semiconductor device as recited in claim 21, wherein an impurity concentration of each of said lightly doped source regions is nearly the same as that of a respective one of said heavily doped source regions, and an impurity concentration of each of said light doped drain region is nearly the same as that of a respective one of said heavily doped drain regions.

Please amend the following claim:

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17. (Once Amended) A MOS transistor as recited in claim 19, wherein an impurity concentration of said lightly doped source region is nearly the same as that of said heavily doped source region, and an impurity concentration of said light doped drain region is nearly the same as that of said heavily doped drain region.